

## **ABSTRACT**

A multi-organ gene profiling analysis of the results of an administration to a subject of salmon calcitonin or a parathyroid hormone analogue provides biomarkers of calcitonin treatment efficacy and parathyroid hormone or parathyroid hormone analogue treatment efficacy. Among the biomarkers are the expression profiles of the genes for Y-box binding protein, BMPs, FGFs, IGFs, VEGF,  $\alpha_2$ -HS glycoprotein (AHSG), OSF, nuclear receptors (steroid/thyroid family) and others. The results obtained support the anabolic effect of salmon calcitonin on bone metabolism.